

LOOK UP

LOOK DOWN

LOOK ALL AROUND™

CHACO CULTURE

NATIONAL HISTORICAL PARK



A LOOK AND SEE ACTIVITY BOOK

LOOK UP
LOOK DOWN
LOOK ALL AROUND™

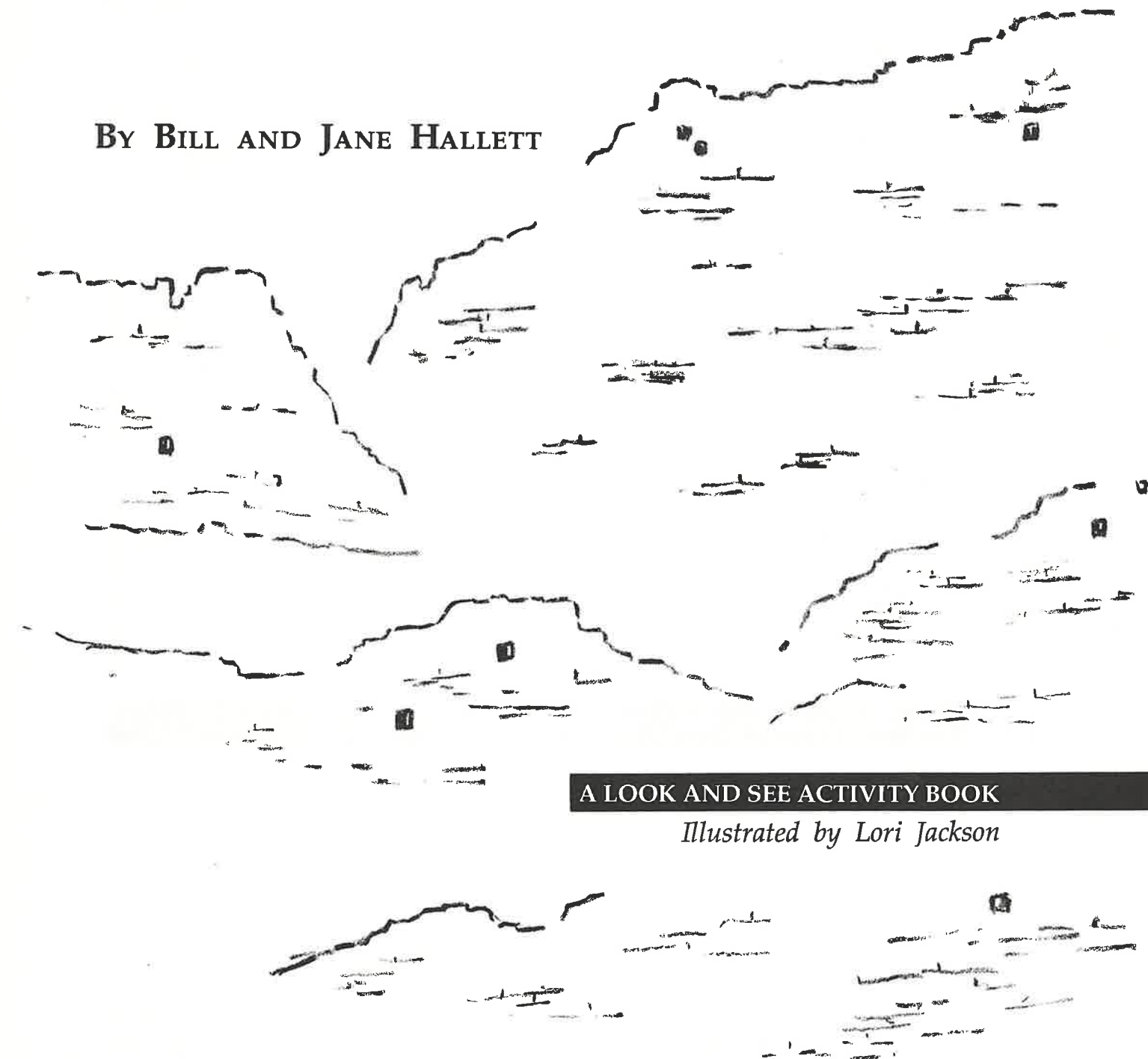


CHACO CULTURE

NATIONAL HISTORICAL PARK

NEW MEXICO

BY BILL AND JANE HALLETT



A LOOK AND SEE ACTIVITY BOOK

Illustrated by Lori Jackson

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Indicates an activity to do at the park

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Look and See Publications

P. O. Box 64216 Tucson, AZ 85728-4216

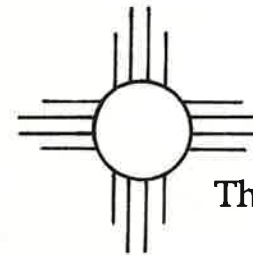
ISBN 1-877827-00-2

Printed in the United States of America

First Edition: May 1989

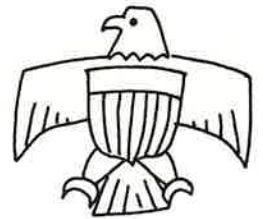
WELCOME TO CHACO CULTURE
NATIONAL HISTORICAL PARK

A symbol is a sign used to represent something.

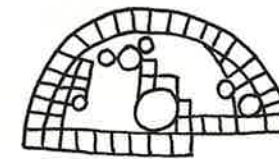


The State of New Mexico uses the Zia sun sign.

The eagle is the symbol of the
United States of America.



Pueblo Bonito



often represents the Anasazi
culture at Chaco Canyon.

What symbols represent you? Draw them. (Hints: where you live, your family, pet, favorite sport, food, season, hobby, your school...)

PERSONAL SYMBOLS OF _____

Your name

CHACO'S STORY

The mysterious history of Chaco Canyon began many thousands of years ago when people first hunted here with . They stayed in rock shelters and temporary camps.

By A.D. 700, people were living in pit houses, making  and growing .

The small villages that followed had one level built above the ground and porches covered with brush.

During the big building boom at Chaco, great kivas and  were built throughout the canyon. In Europe this was during the time of knights and .

From A.D. 1000-1150, the area flourished, but then the Anasazi mysteriously left. It remained silent and empty for about four hundred years until Navajo people began to move into the canyon.

Early Spanish maps and reports mention Chaco Canyon as a route through Navajo lands. The U. S. Army drew and mapped this area in 1849.



 began during the last years of the 19th century and continues today.

In 1907, Chaco Canyon was made a national monument. Scientists continue to study Chaco sites to find answers to many mysteries.

- ♦ What do you think would make all the people in your town leave?
- ♦ Why did the Anasazi build in this dry, barren area?
- ♦ How did they build without metal, the wheel, or animals to carry heavy loads?
- ♦ How many people lived here?
- ♦ How large an area did the Anasazi culture cover?
- ♦ What type of government did they have?
- ♦ Who made the rules and was in control?

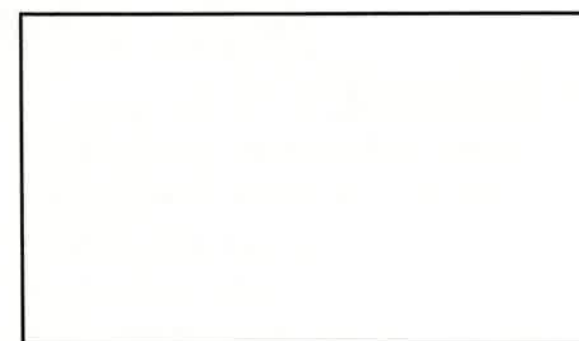
Maybe some day you will help solve the Chaco Canyon mystery.

TOUCH WITH YOUR EYES

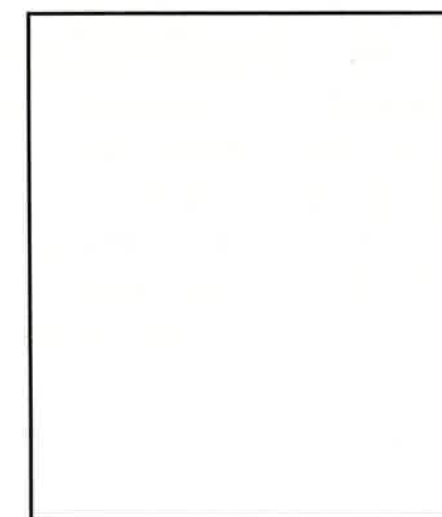


Texture is the way something feels when we touch it. There are many different textures on the walls of the ruins in Chaco Canyon. These walls are very fragile. They can easily crumble and fall, so *touch them only with your eyes*.

Find things in the museum that would feel like the words below and draw them. Which one is your favorite? Circle it.



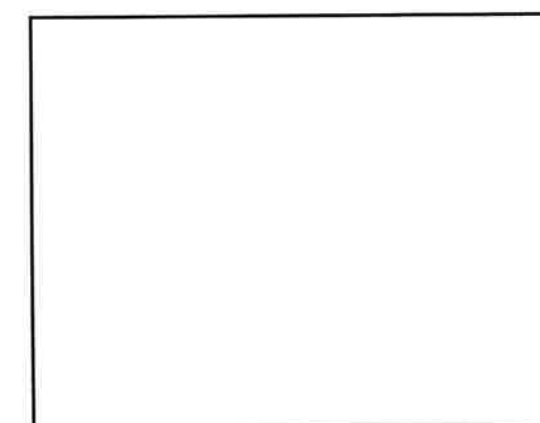
▲ rough



▲ smooth



▲ sharp



dull ▲



▲ soft



▲ hard

ROCK PICTURES - PETROGLYPHS AND PICTOGRAPHS

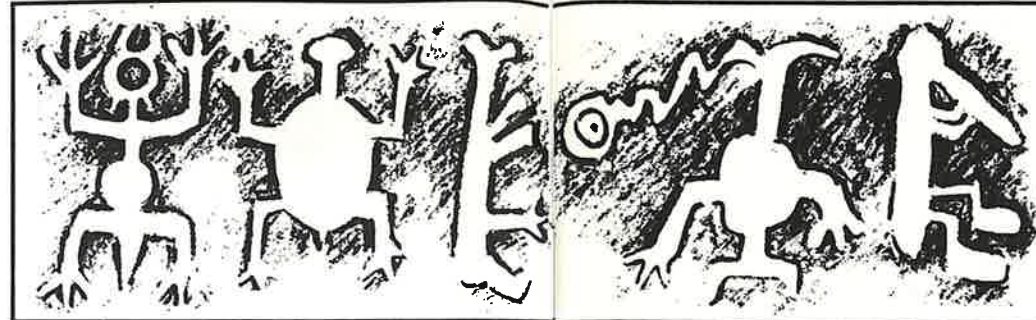


Many ancient people placed signs and symbols on rock cliffs and on the walls of caves.

Have you ever seen a woodpecker searching for its food? This is the way the Anasazi pecked petroglyphs (PET-row-glifs) into a rock's surface. Instead of a bill, they used pieces of stone.



There are many petroglyphs behind Una Vida, Chetro Ketl, and along the canyon wall between Chetro Ketl and Pueblo Bonito. These are very fragile and wear away easily. Remember to *touch only with your eyes* so that others may see and enjoy them. **Write a message or tell a story using these Chaco petroglyphs.**

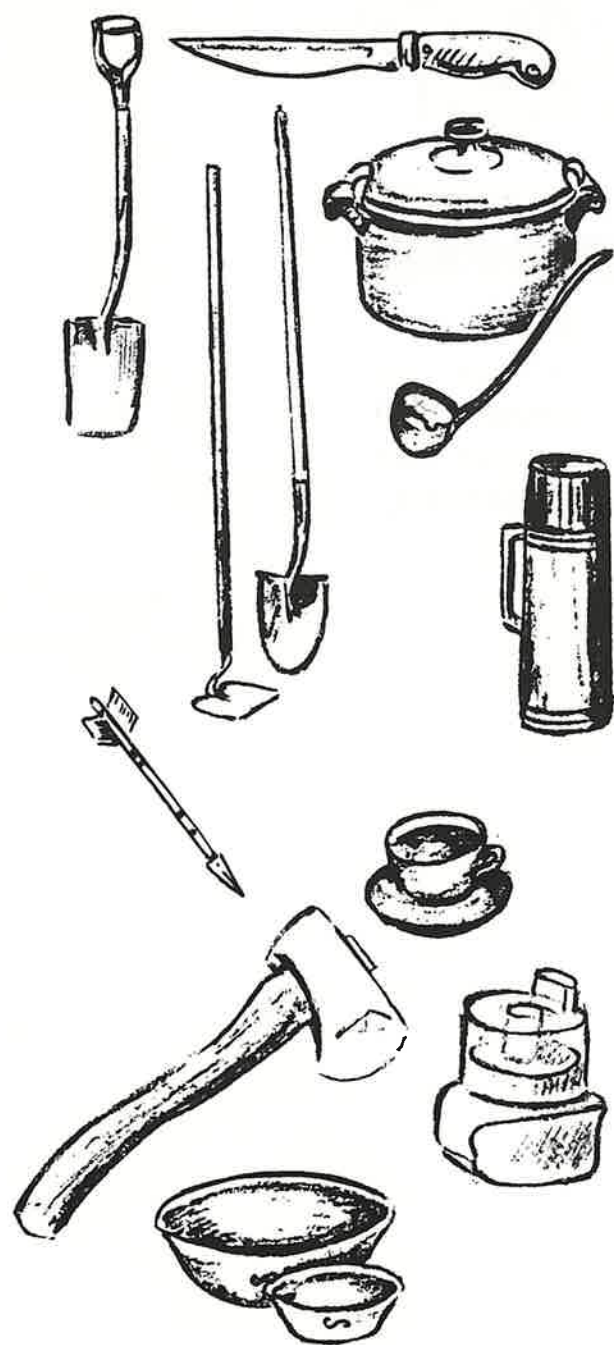


Unlike the petroglyphs shown on these two pages, pictographs (PIK-toe-grafs) are painted on the rock. The most famous pictographs at Chaco are underneath a rock ledge on the trail to Peñasco Blanco. **Find a copy of these three symbols in the museum and draw them. What do these symbols mean to you?**



HELPERS

Here are some tools and utensils we use today.



What did the Anasazi use for the same purposes? Find them and draw them. What are they made of?

Are any of these the same?

A DAY IN MY LIFE

Look carefully at the large model of the Anasazi town in the museum. The scene shows a day in Chaco Canyon. Anasazi children learned by helping their parents. How do you learn? How is your life different? Compare your typical day with theirs.

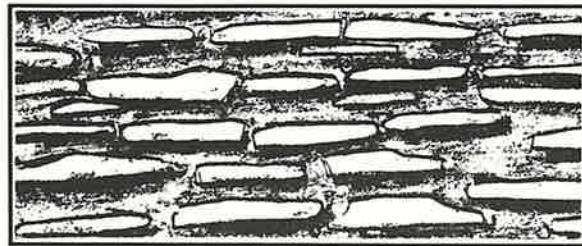
MORNING	
YOUR DAY	ANASAZI DAY
School	Gather wood

AFTERNOON	
YOUR DAY	ANASAZI DAY

NIGHT	
YOUR DAY	ANASAZI DAY



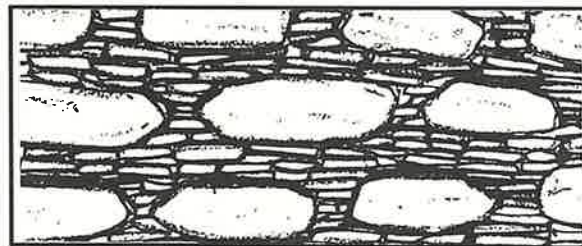
The Anasazi placed stones in different patterns in the walls of their buildings. Examples of five patterns are in the Visitor Center's Museum. Look for these patterns as you visit the sites and write where you find them.



TYPE 1

Thin, irregular slabs of stone--with large amounts of mud mortar

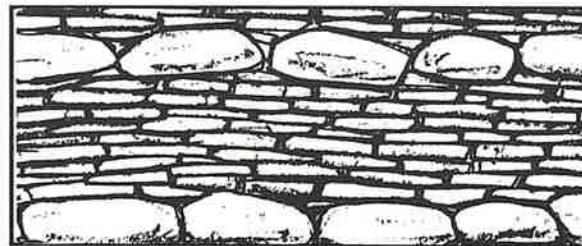
Site: _____



TYPE II

Layers of larger, shaped stone slabs--narrow bands of smaller stones between

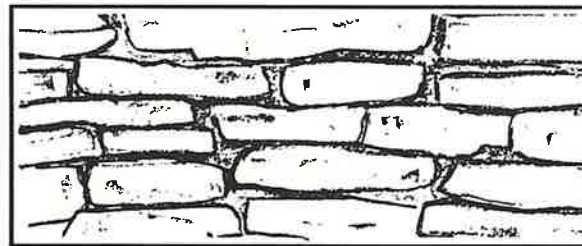
Site: _____



TYPE III

Layers of large blocks of shaped stone--wide bands of small stones between

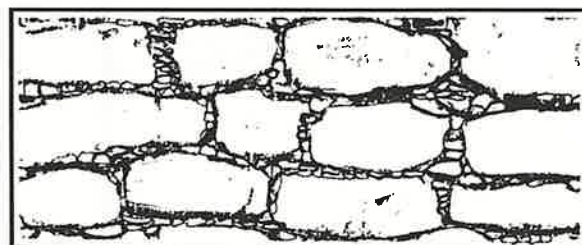
Site: _____



TYPE IV

Cut and fitted slabs of similar size--no regular layers of smaller stones

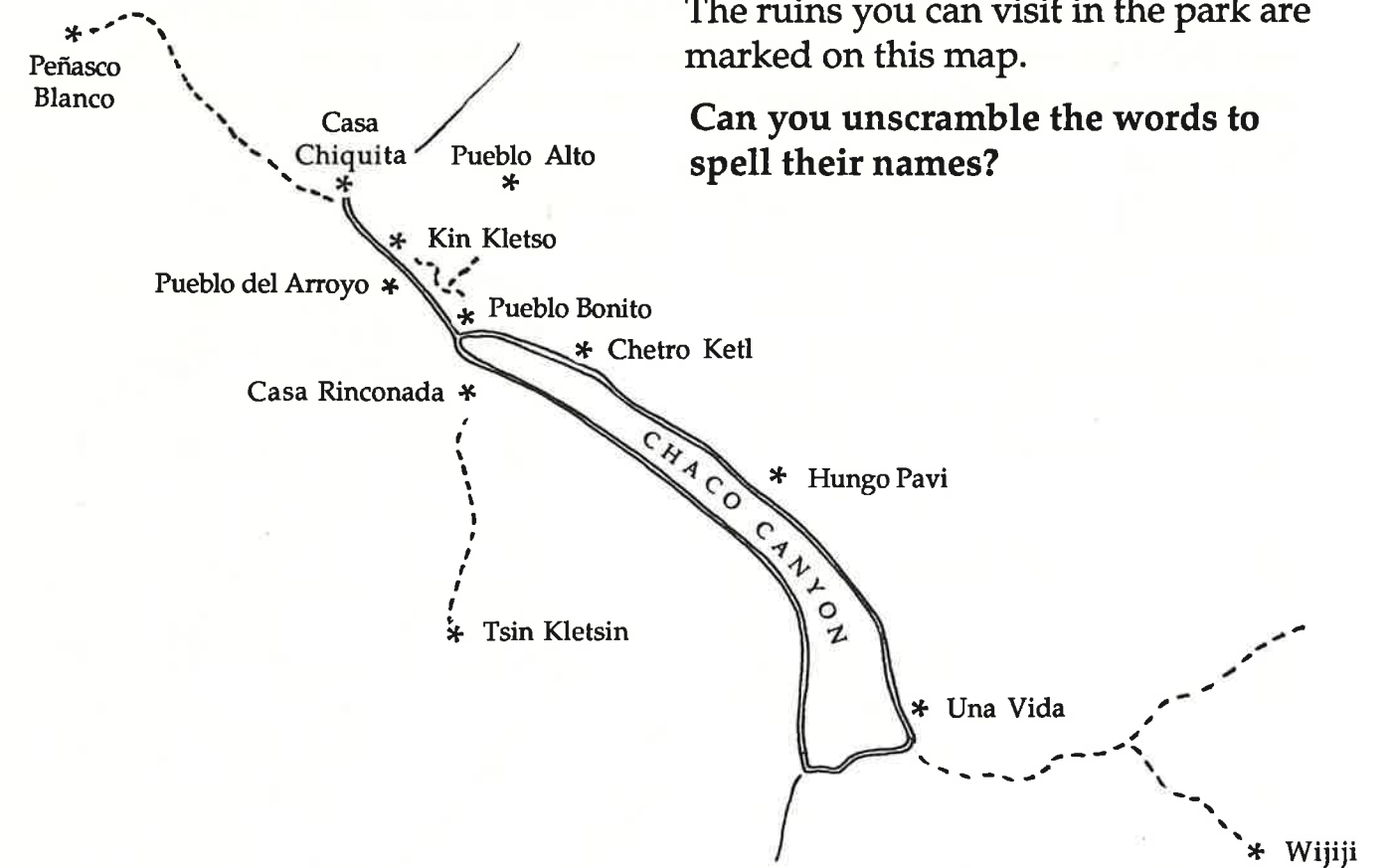
Site: _____



McELMO - TYPE V

Large chunks of stone with pitted surface--small stones scattered between

Site: _____



The ruins you can visit in the park are marked on this map.

Can you unscramble the words to spell their names?

blo eup lato

nik stolke

houng paiv

saac danncoria

rotche telk

lopueb botino

asac tiaqchiu

lobeup led yoraor

ceñosap coblan

nau davi

stin stelkin

jiwiiij

MISSING PIECES

Archeologists are scientists who study the past to learn about people who lived long ago. They have to fit together many pieces of information to get their answers.

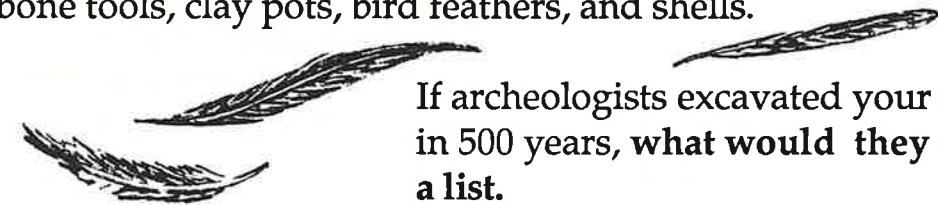
Their work is like a jigsaw puzzle. The puzzle can't be solved if pieces are missing. Leave objects where they are---*Touch only with your eyes.*



Help the archeologists complete this Chaco jar. Put the number of each piece where it belongs.

TIME CAPSULE

Archeologists often excavate (dig up) ancient ruins to learn about the people who lived there. Some of the things they have dug up at Chaco are bone tools, clay pots, bird feathers, and shells.



If archeologists excavated your room in 500 years, what would they find? Make a list.

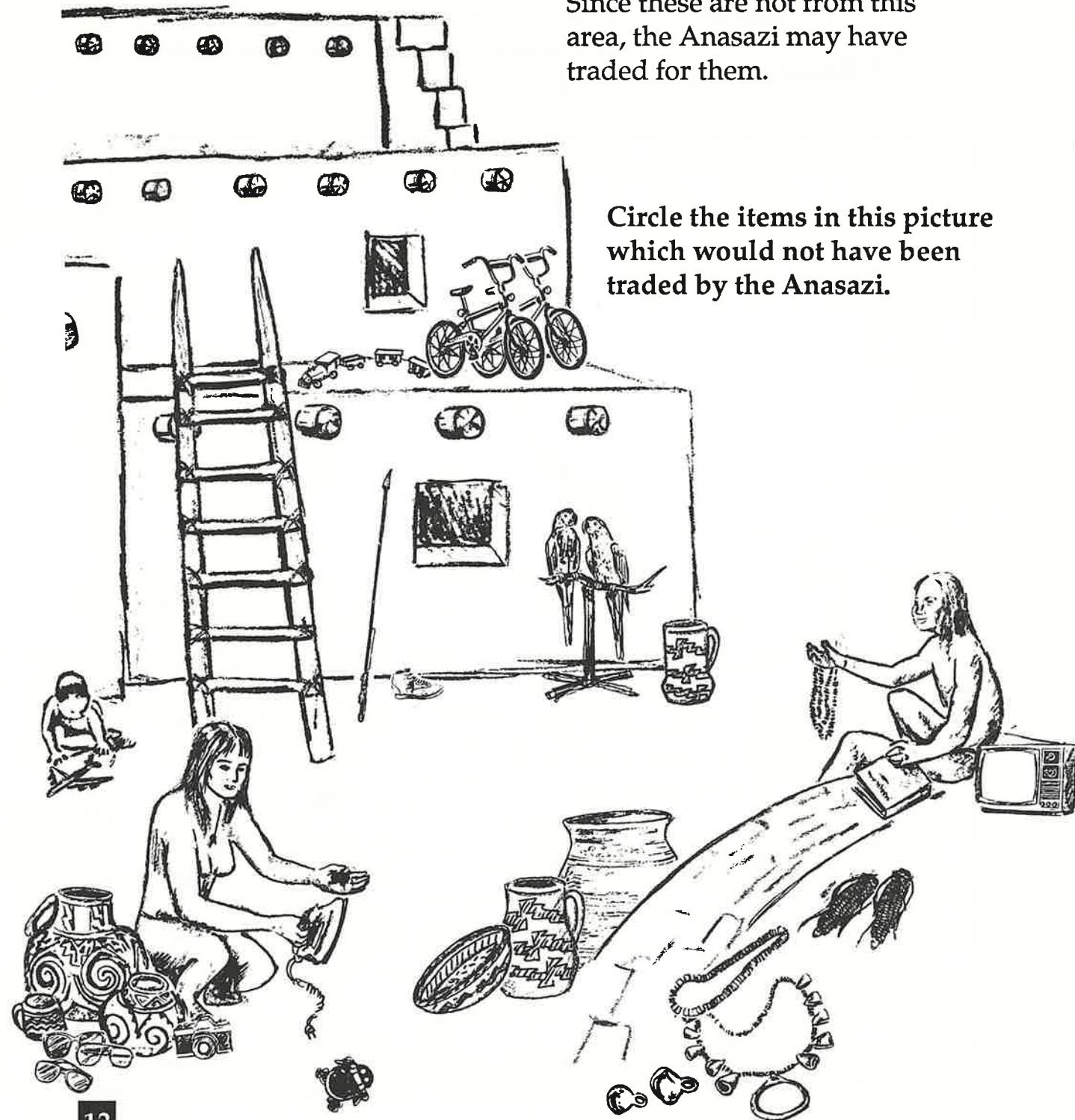
OBJECT	WHAT DOES IT TELL ABOUT YOU?
Bed	

LET'S TRADE

We use money to pay for the things we buy, but the Anasazi didn't have money. They traded things which they had with other people to get what they wanted. Seashells, macaw feathers, and copper bells

have been found at Chaco. Since these are not from this area, the Anasazi may have traded for them.

Circle the items in this picture which would not have been traded by the Anasazi.



THE WORLD AROUND US

Everything, natural or man-made, that surrounds us is our environment--the container in which we live. Look around you at the dry, barren spaces of Chaco Canyon. This is the way the environment looked when the Anasazi left here.

Place your hand in the space below and draw around it. On each finger draw a part of your environment--trees and plants, animals, water, house, weather. How is it like the environment of Chaco Canyon?

TIME PASSES BY

Place the appropriate letter by the date on the time line that each happened.



A.



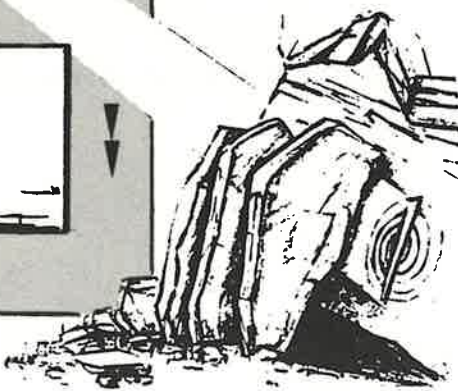
B.



C.



D.



H.



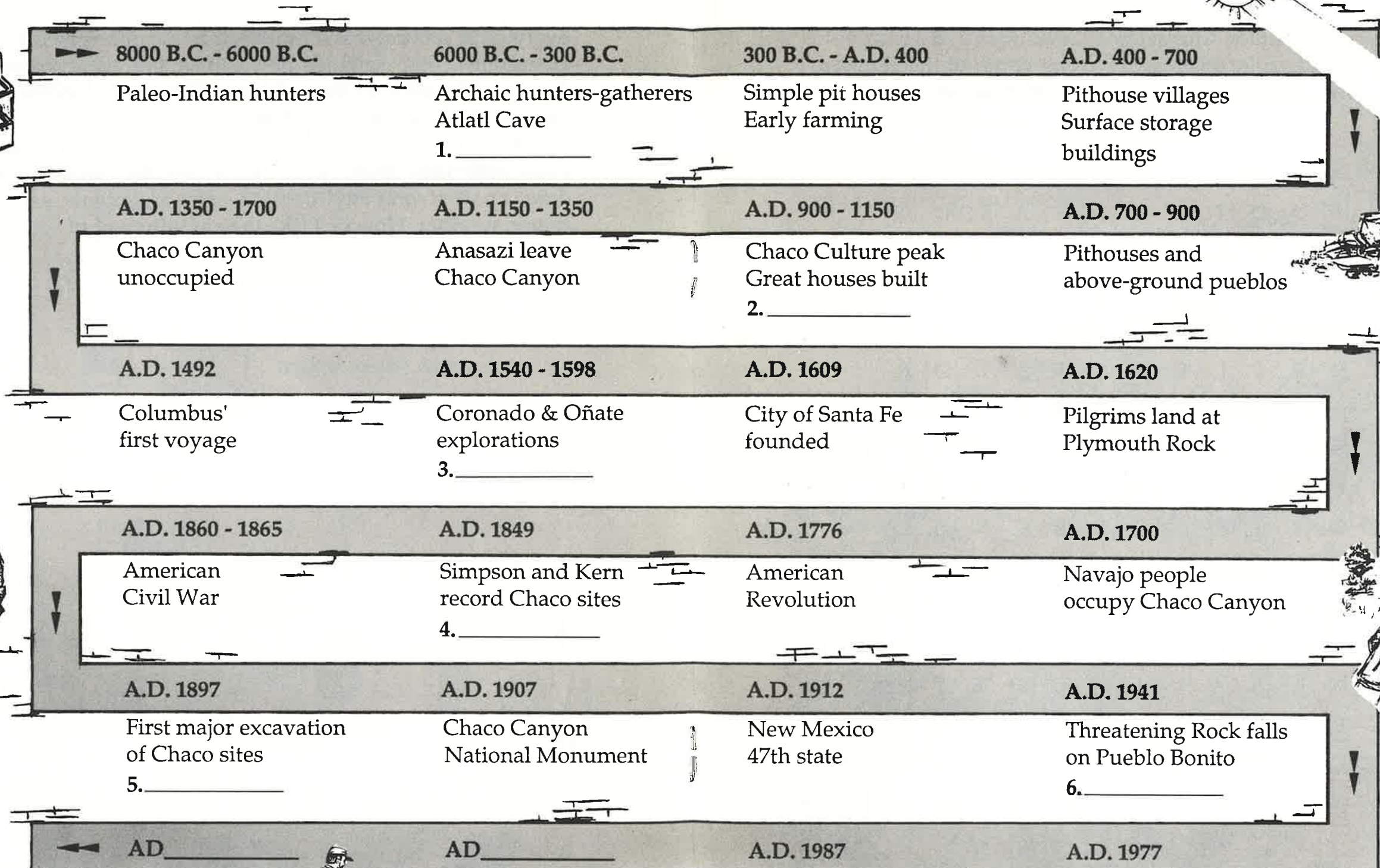
G.



F.



I.



WHAT'S IN A NAME

Since we don't know what the Anasazi called their towns, we use the names the Indians and explorers gave them. **Can you find the names of these Chaco towns in the puzzle? Look for other words about Chaco too.**

A	T	I	U	Q	I	H	C	A	S	A	C	O	O
L	L	T	E	K	O	R	T	E	H	C	D	T	Y
I	N	P	C	U	L	T	U	R	E	A	O	L	O
N	A	E	B	C	H	A	C	O	F	S	A	A	R
I	T	N	P	I	L	L	E	S	T	A	L	O	R
S	I	A	S	A	F	G	J	E	H	R	A	L	A
T	O	S	K	L	R	L	L	B	V	I	C	B	L
E	N	C	S	U	P	K	Q	U	I	N	I	E	E
L	A	O	W	I	N	O	S	R	E	C	R	U	D
K	L	B	Y	I	I	A	A	C	E	O	O	P	O
N	O	L	K	R	J	U	V	E	R	N	T	I	L
I	A	A	R	E	C	I	D	I	Z	A	S	C	B
S	T	N	K	L	A	L	J	R	D	D	I	F	E
T	L	C	X	F	L	E	H	I	A	A	H	K	U
E	R	O	T	I	N	O	B	O	L	B	E	U	P

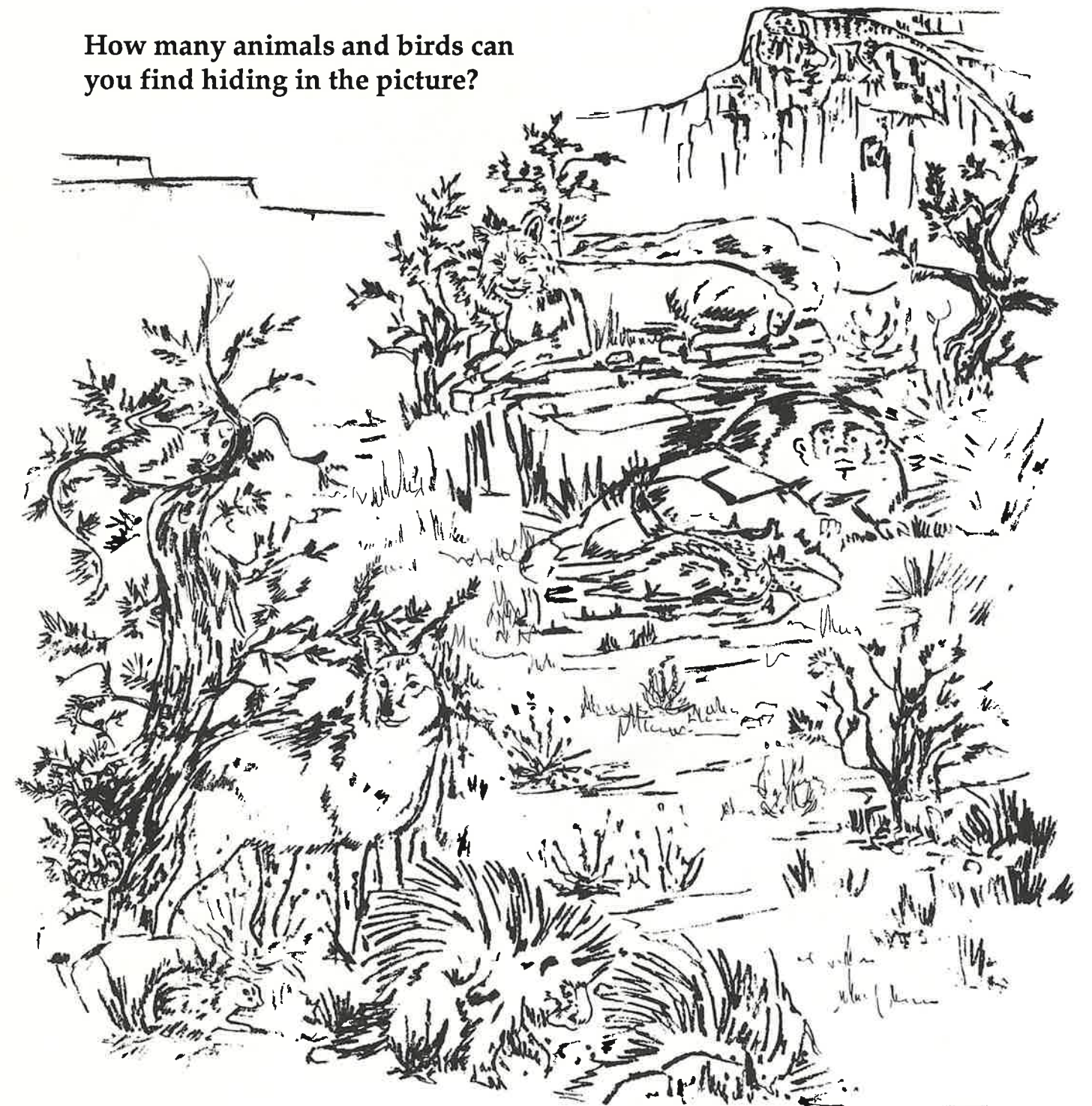
Una Vida..... One Life
 Kin Kletso..... Yellow house
 Peñasco Blanco..... White bluff
 Tsin Kletsin..... Black wood
 Pueblo Alto..... High village
 Pueblo del Arroyo..... Village by the wash

Wijiji..... Black greasewood
 Pueblo Bonito..... Pretty village
 Casa Chiquita..... Tiny house
 Casa Rinconada..... House where canyons meet
 Chetro Ketl..... Covered hole or House in a corner

HIDE 'N SEEK

Many animals and birds live in Chaco Canyon even though the land seems empty. We don't see many of them while we are visiting the ruins because they are usually hiding from the hot sun.

How many animals and birds can you find hiding in the picture?



GENERAL STORE

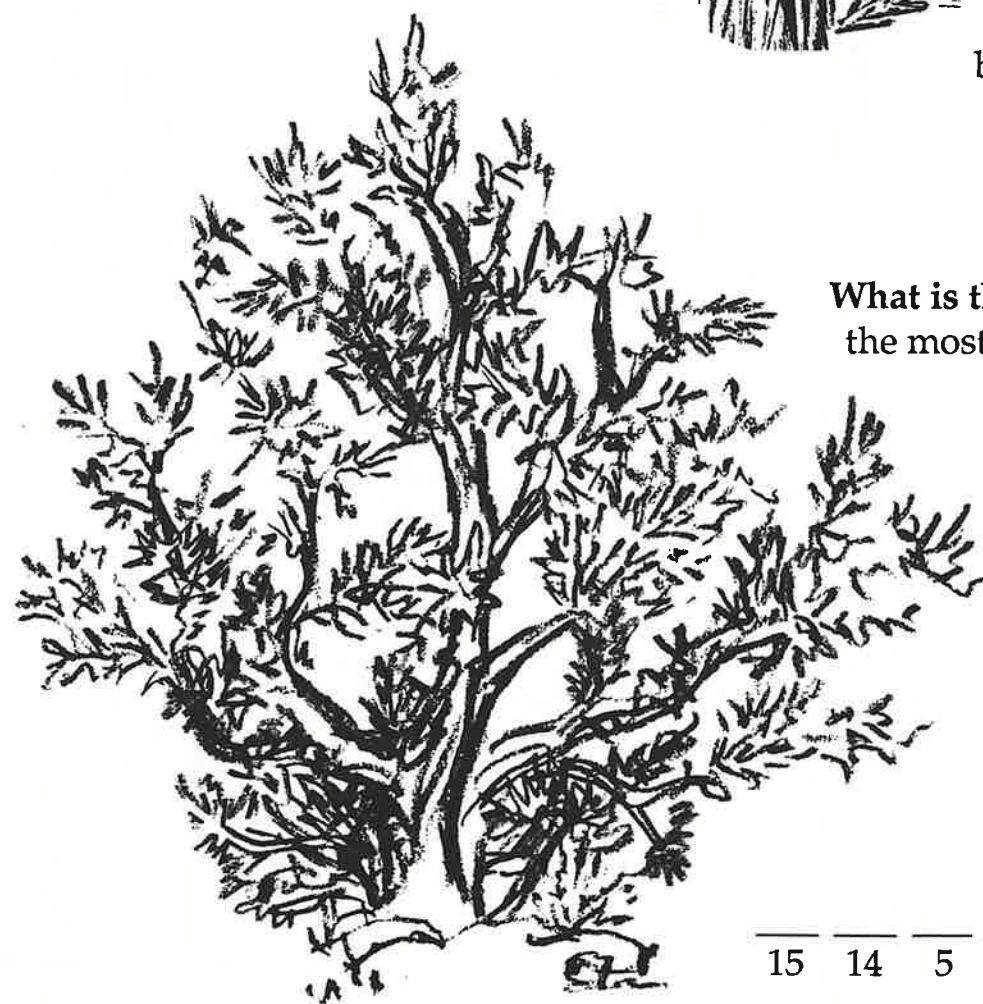
This plant might be called the Anasazi's general store because it was used for so many things. They ate its berries, used them to make dye, and fed them to turkeys.



They used the fibers from the bark to make mats, clothing, and ceiling coverings.



They cut logs for fuel and for large beams in houses.



What is this plant? Clue: It is the most common and tallest evergreen in Chaco Canyon. Numbers tell where the letters are in the alphabet.

15	14	5	19	5	5	4
10	21	14	9	16	5	18

Look for it in the park.

GIFTS FROM THE GODS

Early Indians called corn, beans, and squash Gifts from the Gods or the Three Sisters Given Us by Mother Earth. These crops, natural plants, and the animals they hunted made up the diet of the Anasazi at Chaco.

We eat some of the same foods today and also many that are different. Can you match the food you eat with the plant or animal it comes from? Draw a line to connect them.



Many of the Chaco sites have trash mounds. Clay pottery, bone, wood, stone and fiber objects, and building materials are in these mounds. These are all natural materials which can return to the earth--nature's recycling.

We recycle many things--newspaper, aluminum cans, glass bottles, and old automobiles, but not everything can be recycled. Man-made materials such as plastic bottles and toys cannot be.

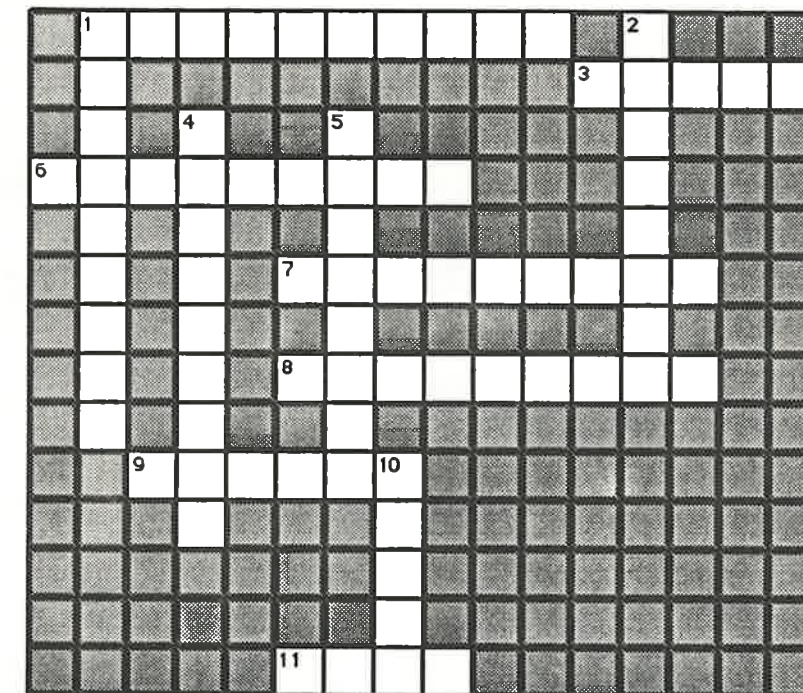


Circle the things in the picture that can't be recycled.

What did you throw away today? Where did you put it? Will it be recycled?

The Anasazi in Chaco Canyon built towers from which they could see to communicate with other towns. They may have built fires, sent smoke signals, or used mirror-like stones to send messages from one place to another.

Today we don't have to see where the signal comes from to get the message. Complete the puzzle to identify ways we communicate.



ACROSS

1. The tube is its nickname
3. Another word for motion picture
6. Key taps out a code
7. Bounces signals from its orbit
8. Big sign along highways
9. Comes by mail in envelope
11. Libraries have many of these

DOWN

1. Way to talk to distant friends and relatives
2. Has monitor and keyboard and stores data
4. Prints the news in black and white
5. Has stories and pictures and comes out on regular schedule
10. Can listen to DJ's on it



1



2

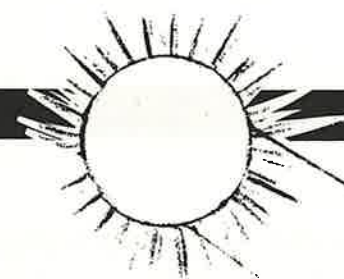
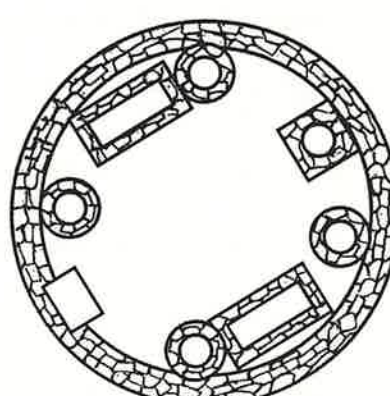
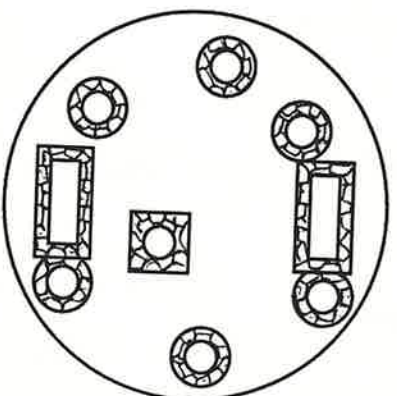
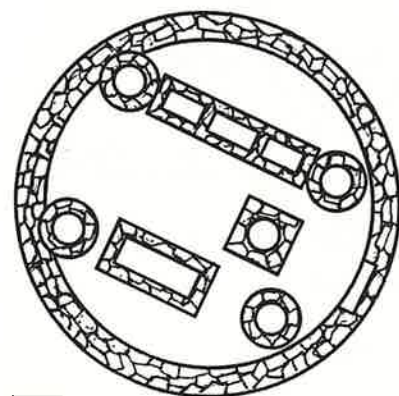
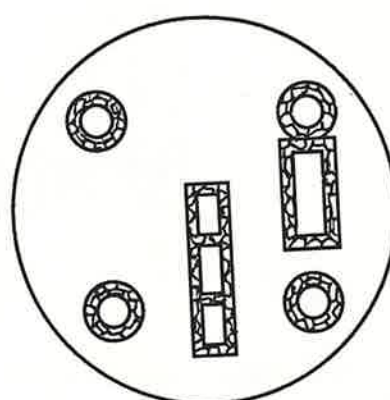
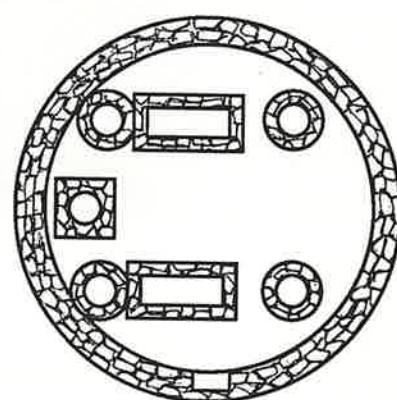
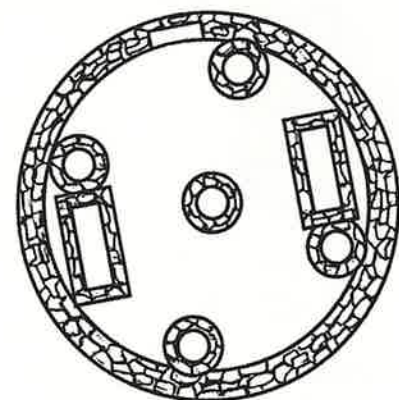


3

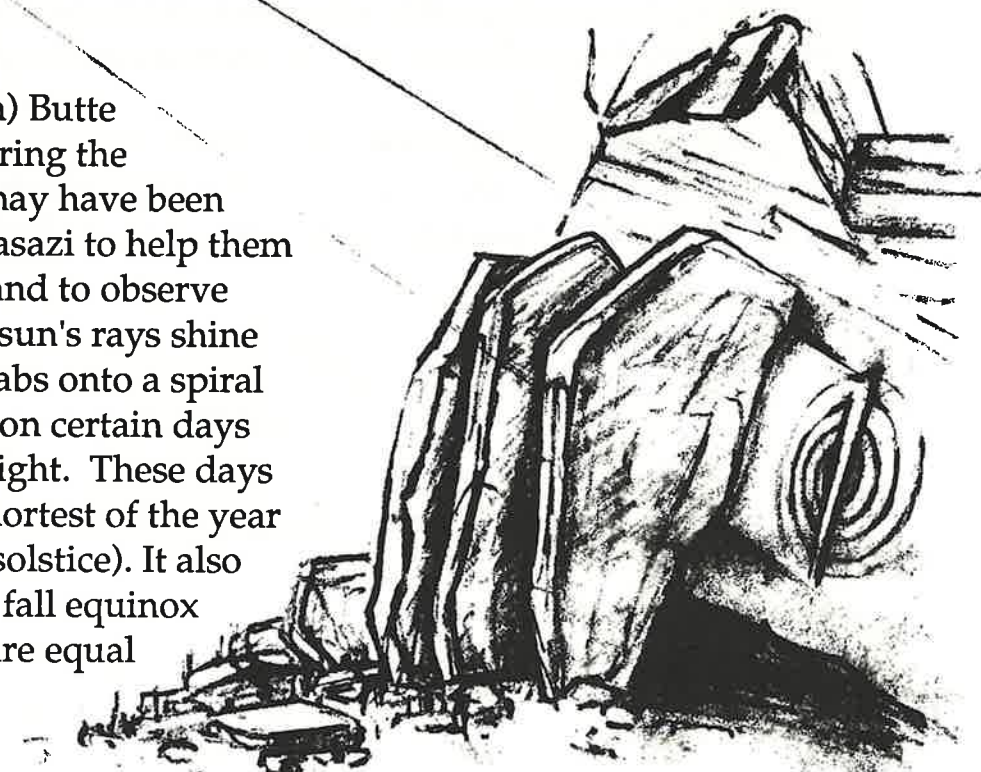


4

Circle the two kiva diagrams that have all the common features of a great kiva.



The Sun Dagger on Fajada (fah-HAH-dah) Butte marks time by measuring the sun's movement. It may have been a calendar for the Anasazi to help them know when to plant and to observe special holidays. The sun's rays shine between three rock slabs onto a spiral petroglyph. At noon on certain days it makes a dagger of light. These days are the longest and shortest of the year (summer and winter solstice). It also marks the spring and fall equinox when night and day are equal in length.



How many other ways to tell time can you name? List them.

Hints:



The Anasazi in Chaco Canyon built over four hundred miles of wide, straight roads to connect with other towns and villages. Cartographers (car-TOG-rah-furs), people who draw maps, have made maps of many of these roads which they can see most easily from the air.

Be a cartographer and draw a map of the streets in your town or neighborhood. Put in your house, the road you take to school, to your best friend's house, the grocery store, and other places you go.

▲
N

People build their homes of materials that are most plentiful. The Pilgrims in the New England forests used _____ to build



The Plains Indians used animal _____

to build their



Eskimos build  of _____.

Many Pueblo Indians built their

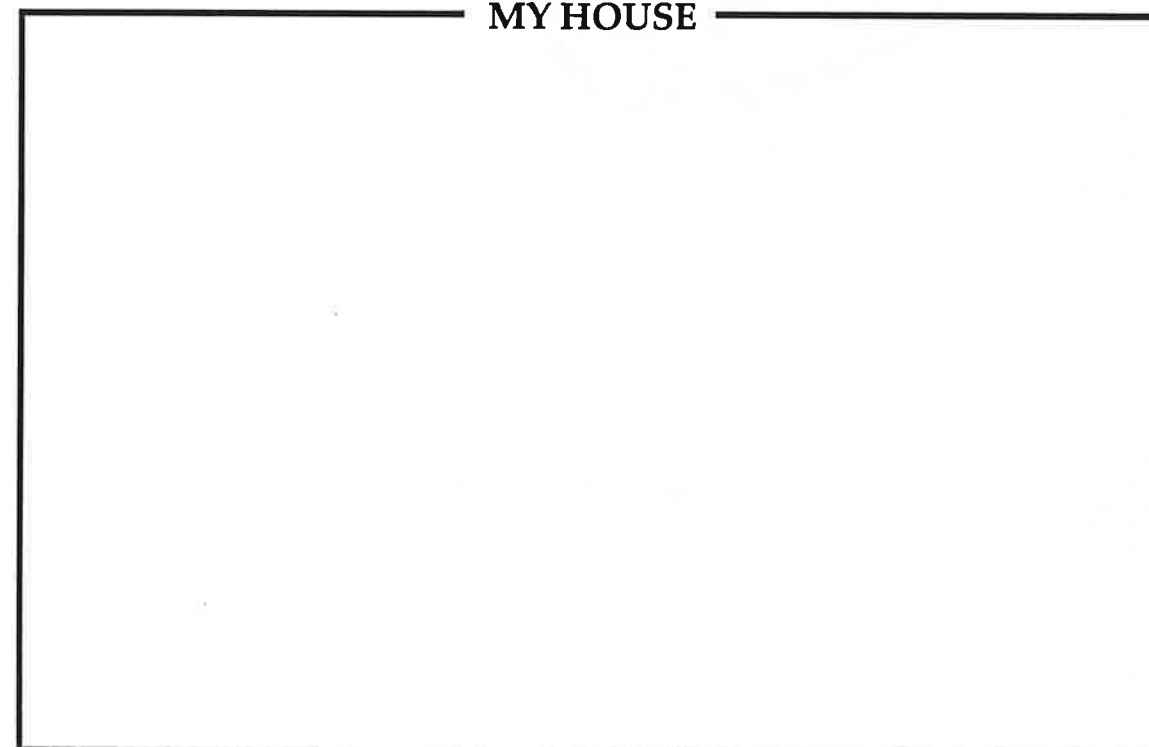


of sun-dried _____
made of clay and straw.

Others such as the Anasazi of Chaco used _____ to build their houses.

What does your house look like? What is it made of? Does it look like any of these houses? **Draw your house in the frame.**

MY HOUSE



RINGS AND DATES

We have birth certificates to tell when we were born, but trees don't. Dendrochronology (den-drow-chron-OLL-ogy) tells the age of trees and when they lived. It is used to match growth rings of trees with master rings from other trees. At Chaco Canyon, this has been used to date when the buildings were put up. We can count these rings to tell how old the tree was when it was cut. Wide and narrow growth rings show good and bad growing seasons.



Something leaned against the tree causing more growth on the opposite side.



Fire or insect damage made a scar.



Drought caused narrow rings.



Wide even rings indicate abundant sunlight and water.



At what age did it grow the most in one year? _____

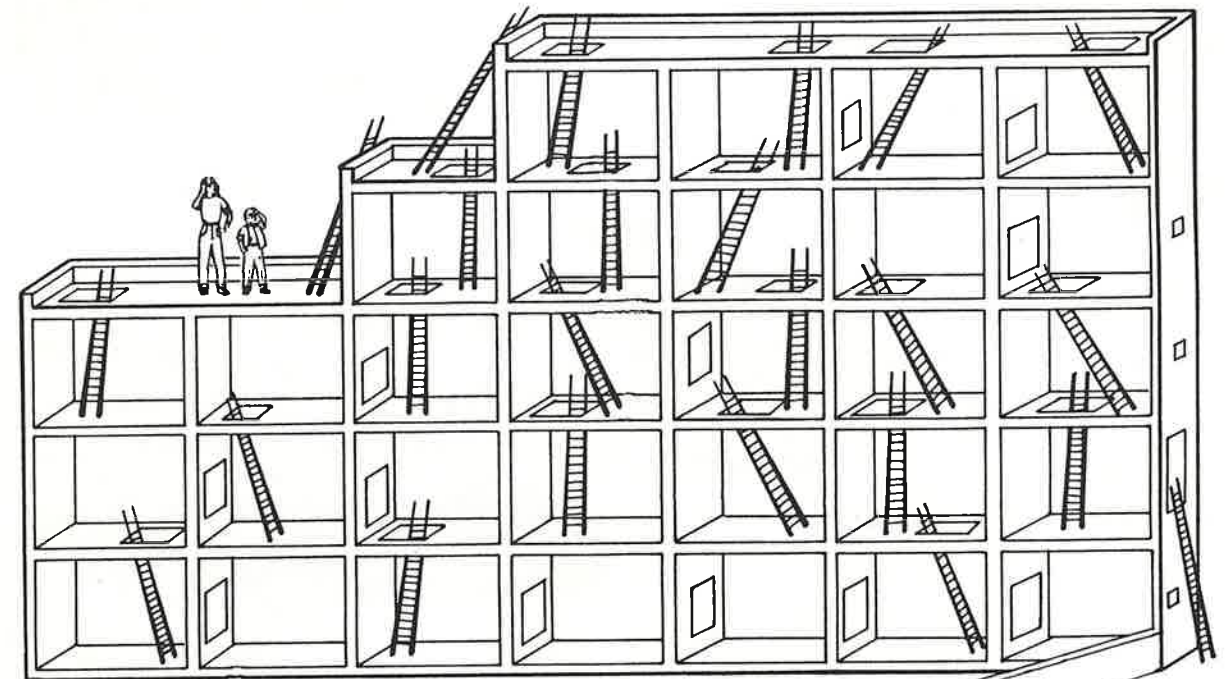
How old was this tree when it was cut? _____

How many droughts did it survive? _____

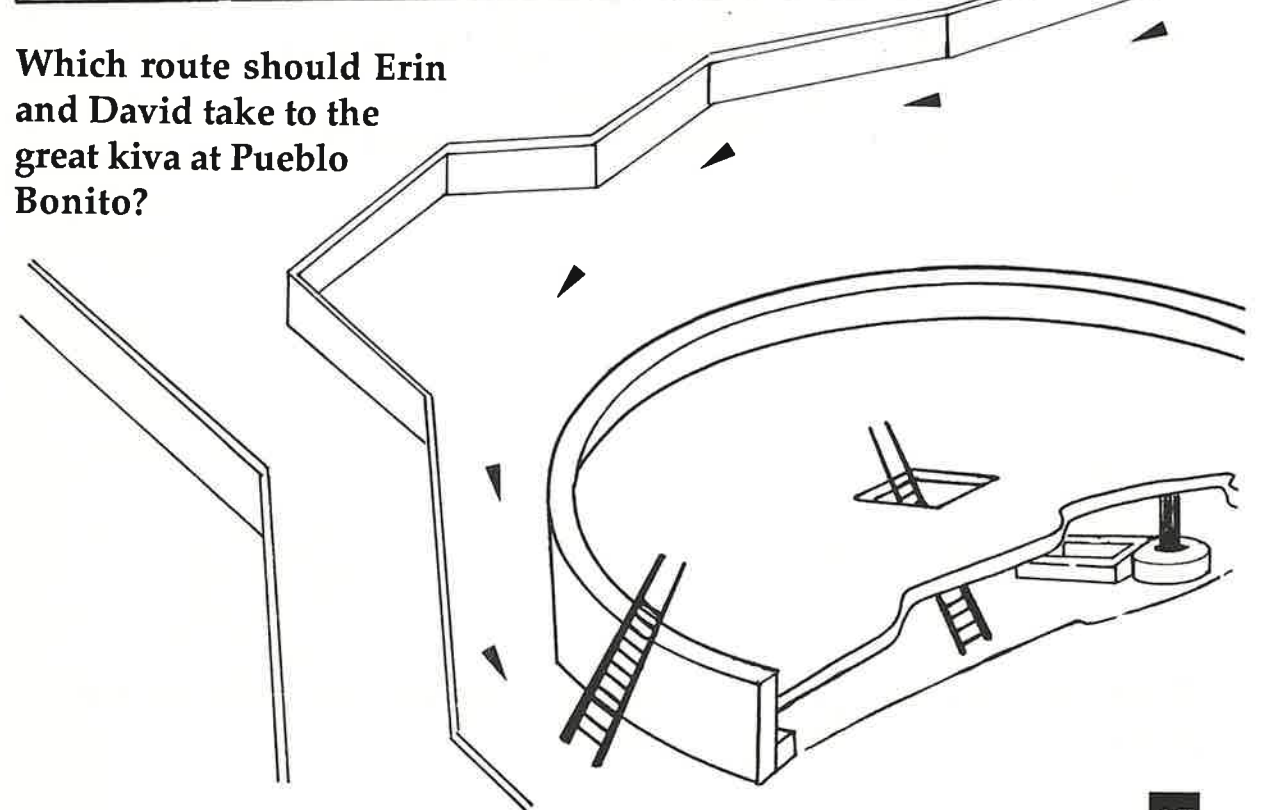
Did it grow straight or did it lean? _____

FIND THE WAY

The largest of the Chaco great houses was Pueblo Bonito. It was as high as five stories and contained nearly eight hundred rooms. Three great kivas and thirty-seven other kivas have been discovered in it.

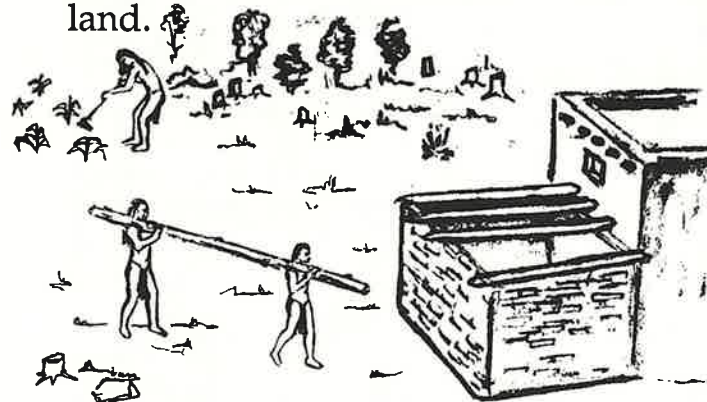


Which route should Erin and David take to the great kiva at Pueblo Bonito?



WHAT'S YOUR CHOICE

During the hundreds of years the Anasazi lived in Chaco Canyon, they made larger and larger demands on their environment. They cut down trees, killed wildlife for food, and farmed the land.



Can this happen to us? ►

After many centuries, they over-used the resources of their environment, and it could no longer support them.

Draw what you think our environment will be in fifty years.

With care

Without care

Thank you for coming to visit Chaco Culture National Historical Park. Please come again and bring a friend!

THINGS TO DO

Stumping---Find a tree stump and count its growth rings. How old was the tree when it was cut? What else can the stump tell you about the tree? You may want to draw a picture of it...or make a rubbing of it with crayon or charcoal on a piece of paper.

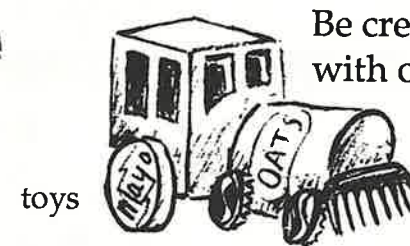


Black on white---Cover a sheet of paper with a thick coat of white crayon marks. Cover the white with a heavy layer of black crayon marks until no white shows. Think of a design like those used on Chaco black-on-white pottery. Take a paint brush handle, stick, comb, nail, etc. and scratch the black crayon off to make your design.

Creative recycling---Choose a small area near your home or school. Be an archeologist and make a list or chart all the trash you can find in the area. How many things can be recycled? How many can't? What can be done with the things that won't recycle? Can you make a game or design a toy using some of the objects?



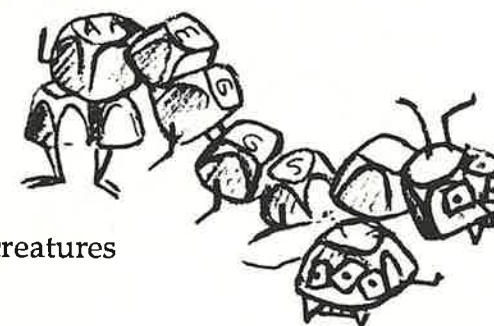
bird feeders



toys

Be creative and make new book covers with old newspapers, magazines, or gift wrapping paper. Or, take a pencil and make a design or a picture on the inside of an old styrofoam tray. Push hard

enough that it makes ridges on the bottom of the tray. Put some ink on the bottom of the tray and press the tray on a clean sheet of paper to print your own work of art.



fun creatures



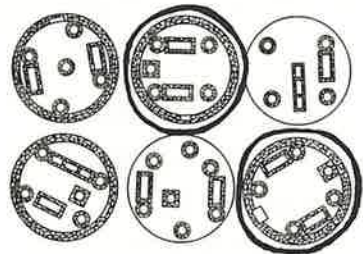
puppets

ANSWER PAGE

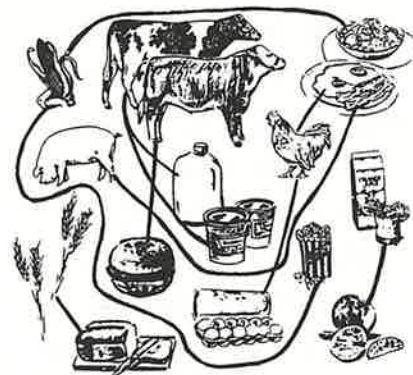
P. 10 MISSING PIECES



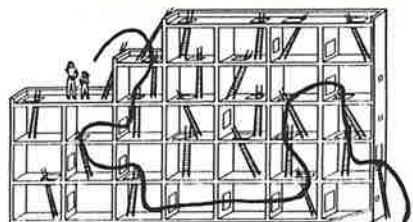
P. 22 GREAT KIVAS



P. 19 GIFTS FROM THE GODS



P. 27 FIND THE WAY



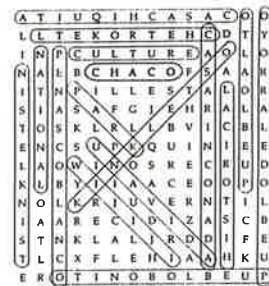
P. 26 RINGS AND DATES

23, 23, 3 OR 4, LEAN

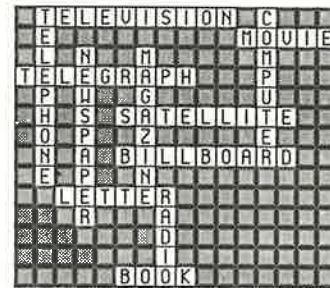
P. 12 LET'S TRADE



P. 16 WHAT'S IN A NAME



P. 21 WHAT'S NEW



P. 18 GENERAL STORE

ONE SEED JUNIPER

P. 14 - 15 TIME PASSES BY
1-F, 2-A, 3-C, 4-D, 5-B, 6-E, 7-G, 8-H

P. 20 RECYCLING

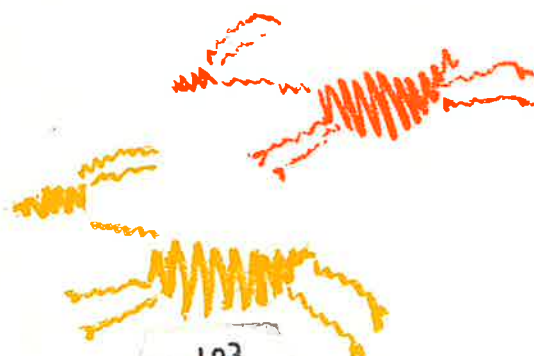


P. 17 HIDE 'N SEEK





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